App. Ser. No.: 10/559,505 Docket No.: 606-118-PCT-PA

Amendment with RCE Oct. 14, 2010

Amendments to the Claims:

The following listing of the claims replaces all previous listings and versions of the

claims in the application.

Listing of the Claims

Claims 1-20: (Cancelled)

21. (Currently Amended) A method for the electronic registration of a cosmic radiation dose to

which a person on a flight in an aircraft is exposed, the method comprising:

(a) providing <u>a</u> system comprising a central computer programmed to register and process electronic data representing information in a flight logbook of the person, and at least one termi-

nal configured to provide data input to the central computer;

(b) inputting flight data to the computer, wherein the input flight data include information

relating to the identity of the person, the date of the flight, a flight identification number, flight

duration time, and departure and arrival locations of the flight; and wherein the inputting of the

flight data to the computer is performed by (1) obtaining access to the at least one terminal by verifying the conforming of an inputted password with the identity of the person, and (2) input-

ting the flight data, including any needed corrections of erroneous flight data, into the at least one

terminal; [[and]]

(c) obtaining observatory data from a remote observatory and inputting the observatory

data to the computer; and

(e) ealeulating (d) operating the computer so as to calculate a radiation dose to which the

person is exposed based on the flight data and the observatory data-available from at least one

observatory.

22. (Currently Amended) The method according to claim 21, further comprising:

[[(d)]] (e) storing the flight data in the computer so as to prevent a subsequent correction

of any of the [[input]] flight data.

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23. (Currently Amended) The method according to claim 22, further comprising:

[[(e)]] (f) accessing the central computer for obtaining an output of [[the]] data regarding the person by inputting the password.

- 24. (Previously Presented) The method according to 21, wherein the system further comprises a GPS unit operable to calculate the longitude, the latitude and the altitude of the aircraft.
- 25. (Currently Amended) The method according claim 21, wherein the ealeulating of computer is operated to calculate a radiation dose is performed by:
 - (1) creating a great circle arc between the departure location and the arrival location:
- (2) dividing the great circle arc into a number of reference points that correspond to the number of minutes of the flight;
- (3) calculating the latitude, longitude, and altitude of the aircraft at each of the reference points of the great circle arc;
- (4) calculating the radiation dose per hour at each of the reference points with a neutron counting number of the time by means of a function with a set of predetermined constants that are selected from the calculated altitude of the aircraft at a time corresponding to each of the reference points;
- (5) correcting the radiation dose per hour to the calculated latitude, longitude, and altitude at each of the reference points by getting a quotient for the actual latitude, longitude, and altitude of the aircraft from a position database, and then multiplying the radiation dose per hour at each of the reference points by the quotient;
- (6) dividing the result of step (5) by 60 to obtain a calculated partial radiation dose at each of the reference points; and
- (7) upon completion of steps (1) through (6) for all of the reference points, summing the calculated partial radiation doses for all of the reference points.
- 26. (Currently Amended) The method according to claim 21, wherein the at least one terminal includes a computer unit selected from the group consisting of at least one of a PC with a control

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program for the execution of the data inputting steps, and an electronic data registration device

connected to a global computer network for the inputting of the flight data into the central com-

puter via the global computer network.

27. (Currently Amended) The method according to claim 21, wherein the flight data input into

the central computer further comprise information regarding weather and low visibility condi-

tions for the flight.

28. (Currently Amended) The method according to claim 21, wherein the electronic flight data

input into the central computer further comprise data regarding characteristics of the aircraft.

29. (Currently Amended) The method according to claim 23, wherein the output of the data re-

garding the person includes an authenticity code generated on the basis of the data regarding the person, the complete time of the flight, and the date and hour of the output of the data regarding

the person.

30. (Previously Presented) The method according to claim 29, wherein the authenticity code is

encrypted.

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